

Date: Tuesday, 10/06/2008 3:14:34 PM
 User: Julie Lecocq

Process Sheet

Customer :	CU-DAR001 Dart Helicopters Services	Drawing Name :	SADDLE FITTING, FWD (OUTBOARD/INBOARD)
Job Number :	39806		
Estimate Number :	10530		
P.O. Number :		Part Number :	D2571
This Issue :	10/06/2008	S.O. No. :	
Prsht Rev. :	NC	Drawing Number :	D2571 REV E
First Issue :	//	Project Number :	N/A
Previous Run :	39122	Drawing Revision :	E
Written By :		Material :	
Checked & Approved By :	<u>JLD 08.6.10</u>	Due Date :	30/06/2008
Comment :	Est: 1 02.10.02 Re-format; Change to Dwg Rev. D & incorporated D2572KJ		

20

Qty: 8 Um: Each

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
1.0	D6101007	Saddle Billet
Comment: Qty.: 1.0000 Each(s)/Unit Total : 8.0000 Each(s) 7075-T7351 8.25X7.75X2.5 Make from D6101-007 billet for D2571 Ensure that grain is along 7.75" length Batch No: <u>B 34875</u>		
2.0	HAAS1	HAAS CNC VERTICAL MACHINING #1
Comment: HAAS CNC VERTICAL MACHINING #1 Program Batch No. <u>39806</u> Double check by: <u>DD</u> 1-Machine Step No 1 per Folio FA051 and inspect per attached Dimension Sheets 2-Machine Step No 2 per Folio FA051 and inspect per attached Dimension Sheets 3-Machine Step No 3 per Folio FA051 and inspect per attached Dimension Sheets 4-Deburr and remove all machining marks 5-Tumble to remove sharp edges.		
3.0	MILLING CONV.	CONVENTIONAL MILLING MACHINE
Comment: CONVENTIONAL MILLING MACHINE Machine keyway as per dwg D2571 & D2572		
4.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
Comment: INSPECT PARTS AS THEY COME OFF MACHINE		

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D2571 PAR #: N/A Fault Category: Prod / Machined NCR: (Yes) No DQA: D Date: 08/07/16
D412-742 QA: N/C Closed: D Date: 08/07/16

NCR: <u>39806</u>		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
<u>08/07/08</u>	<u>2</u>	<u>1 part saddle lifted while machining causing vibrations on 4th axis, so dimension ② .362 ± .010 is .345 to .355</u> <u>RL Tooling is starting to show wear (1.5 in.)</u>	<u>[Signature]</u> <u>08/07/08</u>	<u>SCRAP PART</u> <u>Destroy and</u> <u>Replace B# 34675</u>	<u>J.L.</u> <u>08/07/08</u>	<u>[Signature]</u> <u>08/07/08</u>	<u>[Signature]</u> <u>08/07/08</u>	<u>[Signature]</u> <u>08/07/08</u>

NOTE: Date & initial all entries

Date: Tuesday, 10/06/2008 3:14:34 PM
User: Julie Lecocq

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: SADDLE FITTING, FWD (OUTBOARD/INBOARD)

Job Number: 39806

Part Number: D2571

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

QC8

SECOND CHECK



Comment: SECOND CHECK

08/07/15 X13

6.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Acid etch and Alodine as per QSI 005 4.1

Handwritten signature and date 08/07/15

Handwritten circled 13

7.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat White Gloss (Ref: 4.3.5.1) as per QSI 005 4.3

START TIME: 1:30pm

OVEN TEMPERATURE: 320°F

FINISH TIME: 2:00pm

Handwritten date 08-07-15

Handwritten circled X13

8.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT

Handwritten signature

Handwritten date 08/07/15

9.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location:

Handwritten signature and date 8/7/15

Handwritten circled 13

10.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

Handwritten date 08/07/16

Job Completion



Handwritten date MF 08-07-16

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____
 QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD	Work Order: 39806
Description: Saddle, Fwd Outboard	Part Number: D2571
Inspection Dwg: D2571 Rev. E	Page 1 of 1

Inspect dimensions highlighted on inspection sheet drawing D2571 Rev. E and record below:

				Recorded Actual Dimensions				By	Date
Dim	Min	Max	Go/No Go Gauge	1	2	3	4		
A	0.438	0.443		.446	.440	.440	.440		
B	1.745	1.755		1.750	1.750	1.750	1.750		
C	3.495	3.505		3.506	3.500	3.500	3.500		
D	1.745	1.755		1.750	1.750	1.750	1.750		
E	7.990	8.010		8.000	8.001	8.001	8.001		
F	0.490	0.510		.510	.501	.499	.504		
G	0.257	0.262		.259	.259	.258	.258		
H	0.375	0.380		.378	.378	.378	.378		
I	0.490	0.510		.500	.500	.500	.500		
J	1.174	1.184		1.180	1.180	1.179	1.179		
K	0.558	0.578		.568	.569	.567	.568		
L	1.174	1.184		1.186	1.180	1.179	1.179		
M	1.490	1.500		1.498	1.499	1.495	1.495		
N	2.495	2.505		2.499	2.500	2.500	2.500		
O	3.869	3.879		3.872	3.873	3.874	3.874		
P	0.115	0.135		.124	.125	.122	.123		
Q	0.115	0.135		.135	.135	.135	.135		
R	0.240	0.260		.248	.250	.249	.248		
S	0.115	0.135		.135	.129	.127	.125		
T	0.178	0.198		.188	.188	.188	.188		
U	2.940	2.980		2.958	2.960	2.960	2.960		
V	0.230	0.250		.236	.236	.240	.239		
W	0.115	0.135		.124	.120	.124	.126		
X	0.308	0.313		.310	.310	.310	.310		
Y	0.760	0.765		.760	.760	.760	.760		
Z	0.352	0.372		.359	.364	.363	.362		
AA	0.470	0.530		.500	.500	.500	.500		
AB	0.615	0.635		.631	.626	.627	.630		
AC	0.053	0.073		.063	.063	.063	.063		
AD	0.240	0.260		.246	.245	.250	.249		
AE	1.375	1.395		1.388	1.388	1.387	1.388		
AF	0.115	0.135		.126	.131	.125	.125		
AG	0.240	0.280		.260	.260	.260	.260		
AH	0.240	0.260		.247	.246	.250	.249		
AI	2.000	2.020		2.002	2.000	2.000	2.000		
AJ	0.023	0.043		.033	.033	.033	.033		
Accept/Reject									

Measured by: <i>mk</i>
Date: 08/07/10

Audited by: <i>S</i>
Date: 08/07/10

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.09.24	Re-format; Added Rev. D	KJ	
C	02.10.11	Re-format; Added DT8682, DT8683, DT8684	KJ	
D	05.05.05	Added dimension AI	KJ/RF	
E	05.12.05	Added dimension AJ	KJ/JLM	

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD	Work Order: 39806
Description: Saddle, Fwd Outboard	Part Number: D2571
Inspection Dwg: D2571 Rev. E	Page 1 of 1

Inspect dimensions highlighted on inspection sheet drawing D2571 Rev. E and record below:

				Recorded Actual Dimensions					
Dim	Min	Max	Go/No Go Gauge	1	2	3	4	By	Date
A	0.438	0.443		.440	.440	.440	.440		
B	1.745	1.755		1.750	1.750	1.750	1.750		
C	3.495	3.505		3.506	3.506	3.506	3.506		
D	1.745	1.755		1.750	1.750	1.750	1.750		
E	7.990	8.010		8.000	8.000	8.000	8.000		
F	0.490	0.510		.502	.506	.502	.506		
G	0.257	0.262		.260	.259	.259	.259		
H	0.375	0.380		.378	.378	.378	.378		
I	0.490	0.510		.499	.499	.499	.500		
J	1.174	1.184		1.179	1.179	1.179	1.180		
K	0.558	0.578		.566	.566	.564	.567		
L	1.174	1.184		1.179	1.179	1.179	1.179		
M	1.490	1.500		1.494	1.495	1.496	1.493		
N	2.495	2.505		2.500	2.500	2.500	2.500		
O	3.869	3.879		3.876	3.873	3.872	3.874		
P	0.115	0.135		.130	.129	.128	.129		
Q	0.115	0.135		.135	.135	.135	.135		
R	0.240	0.260		.257	.251	.249	.250		
S	0.115	0.135		.130	.130	.131	.131		
T	0.178	0.198		.188	.188	.188	.188		
U	2.940	2.980		2.960	2.960	2.960	2.960		
V	0.230	0.250		.232	.232	.236	.236		
W	0.115	0.135		.124	.125	.125	.127		
X	0.308	0.313		.309	.309	.309	.309		
Y	0.760	0.765		.761	.760	.760	.760		
Z	0.352	0.372		.362	.363	.362	.365		
AA	0.470	0.530		.500	.506	.506	.506		
AB	0.615	0.635		.632	.630	.631	.634		
AC	0.053	0.073		.063	.063	.063	.063		
AD	0.240	0.260		.240	.240	.244	.244		
AE	1.375	1.395		1.388	1.395	1.391	1.389		
AF	0.115	0.135		.135	.135	.135	.135		
AG	0.240	0.280		.260	.260	.260	.260		
AH	0.240	0.260		.242	.244	.247	.246		
AI	2.000	2.020		2.000	2.006	2.002	2.001		
AJ	0.023	0.043		.033	.033	.033	.033		
Accept/Reject									

Measured by: <i>md</i>	Audited by: <i>S</i>
Date: 08/07/16	Date: 08/07/15

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.09.24	Re-format; Added Rev. D	KJ	
C	02.10.11	Re-format; Added DT8682, DT8683, DT8684	KJ	
D	05.05.05	Added dimension AI	KJ/RF	
E	05.12.05	Added dimension AJ	KJ/JLM	<i>[Signature]</i>

DART AEROSPACE LTD	Work Order: 39806
Description: Saddle, Fwd Outboard	Part Number: D2571
Inspection Dwg: D2571 Rev. E	Page 1 of 1

Inspect dimensions highlighted on inspection sheet drawing D2571 Rev. E and record below:

				Recorded Actual Dimensions					
Dim	Min	Max	Go/No Go Gauge	1	2	3	4	By	Date
A	0.438	0.443		440	440	440	440		
B	1.745	1.755		1.750	1.750	1.750	1.750		
C	3.495	3.505		3.500	3.500	3.500	3.500		
D	1.745	1.755		1.750	1.750	1.750	1.750		
E	7.990	8.010		8.000	8.000	8.000	8.000		
F	0.490	0.510		.503	.505	.505	.504		
G	0.257	0.262		.259	.259	.259	.259		
H	0.375	0.380		.378	.378	.378	.378		
I	0.490	0.510		.500	.499	.500	.500		
J	1.174	1.184		1.177	1.179	1.179	1.179		
K	0.558	0.578		.566	.565	.566	.568		
L	1.174	1.184		1.172	1.179	1.179	1.179		
M	1.490	1.500		1.495	1.494	1.495	1.494		
N	2.495	2.505		2.500	2.500	2.500	2.499		
O	3.869	3.879		3.871	3.874	3.872	3.872		
P	0.115	0.135		.129	.129	.128	.129		
Q	0.115	0.135		.135	.135	.135	.135		
R	0.240	0.260		.248	.249	.251	.249		
S	0.115	0.135		.122	.122	.129	.128		
T	0.178	0.198		.188	.188	.188	.188		
U	2.940	2.980		2.966	2.960	2.960	2.960		
V	0.230	0.250		.235	.236	.237	.237		
W	0.115	0.135		.126	.122	.127	.128		
X	0.308	0.313		.309	.308	.309	.309		
Y	0.760	0.765		.760	.760	.760	.761		
Z	0.352	0.372		.364	.364	.364	.362		
AA	0.470	0.530		.500	.500	.500	.500		
AB	0.615	0.635		.634	.628	.626	.628		
AC	0.053	0.073		.063	.063	.063	.063		
AD	0.240	0.260		.245	.242	.246	.247		
AE	1.375	1.395		1.390	1.390	1.388	1.389		
AF	0.115	0.135		.135	.135	.135	.135		
AG	0.240	0.280		.260	.260	.260	.260		
AH	0.240	0.260		.245	.246	.248	.249		
AI	2.000	2.020		2.001	2.001	2.000	2.000		
AJ	0.023	0.043		.033	.033	.033	.033		
Accept/Reject									

Measured by: <i>mf</i>	Audited by: <i>S</i>
Date: 08/07/11	Date: 08/09/15

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.09.24	Re-format; Added Rev. D	KJ	
C	02.10.11	Re-format; Added DT8682, DT8683, DT8684	KJ	
D	05.05.05	Added dimension AI	KJ/RF	
E	05.12.05	Added dimension AJ	KJ/JLM	

DART AEROSPACE LTD	Work Order: 39806
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Inspection Dwg: D2571 Rev. E	Page 1 of 1

Inspect dimensions highlighted on inspection sheet drawing D2571 Rev. E and record below:

				Recorded Actual Dimensions					
Dim	Min	Max	Go/No Go Gauge	1	2	3	4	By	Date
A	0.438	0.443		.440					
B	1.745	1.755		1.750					
C	3.495	3.505		3.500					
D	1.745	1.755		1.750					
E	7.990	8.010		8.000					
F	0.490	0.510		.506					
G	0.257	0.262		.259					
H	0.375	0.380		.378					
I	0.490	0.510		.500					
J	1.174	1.184		1.179					
K	0.558	0.578		.566					
L	1.174	1.184		1.179					
M	1.490	1.500		1.495					
N	2.495	2.505		2.500					
O	3.869	3.879		3.872					
P	0.115	0.135		.136					
Q	0.115	0.135		.135					
R	0.240	0.260		.250					
S	0.115	0.135		.130					
T	0.178	0.198		.188					
U	2.940	2.980		2.960					
V	0.230	0.250		.236					
W	0.115	0.135		.128					
X	0.308	0.313		.309					
Y	0.760	0.765		.760					
Z	0.352	0.372		.363					
AA	0.470	0.530		.506					
AB	0.615	0.635		.628					
AC	0.053	0.073		.063					
AD	0.240	0.260		.243					
AE	1.375	1.395		1.391					
AF	0.115	0.135		.135					
AG	0.240	0.280		.260					
AH	0.240	0.260		.246					
AI	2.000	2.020		2.002					
AJ	0.023	0.043		.033					
Accept/Reject									

Measured by:	mf
Date:	08/07/15

Audited by:	S
Date:	08/07/15

Rev	Date	Change	Revised by	Approved
A		New Issue	RF	
B	02.09.24	Re-format; Added Rev. D	KJ	
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Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

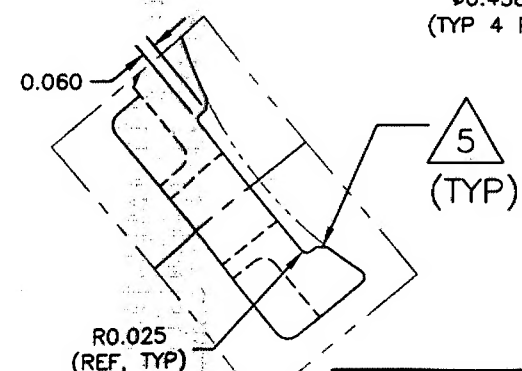
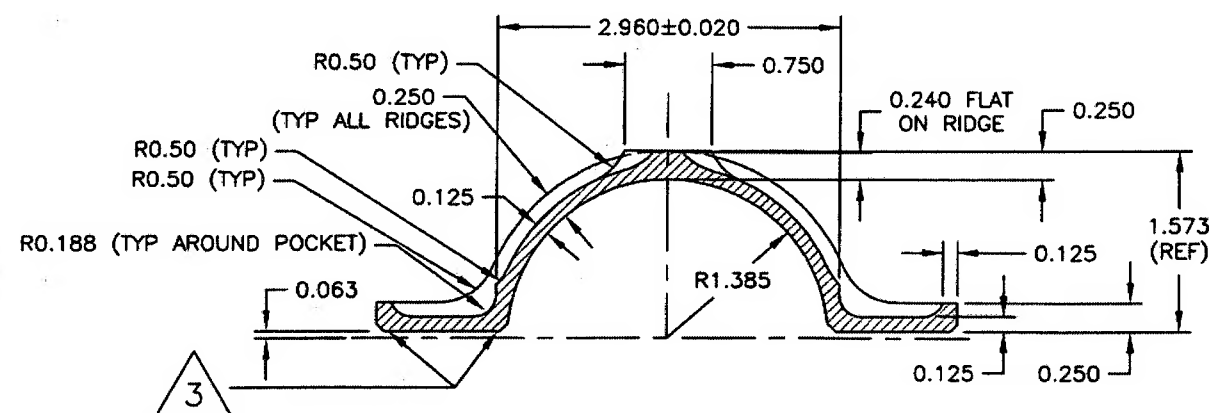
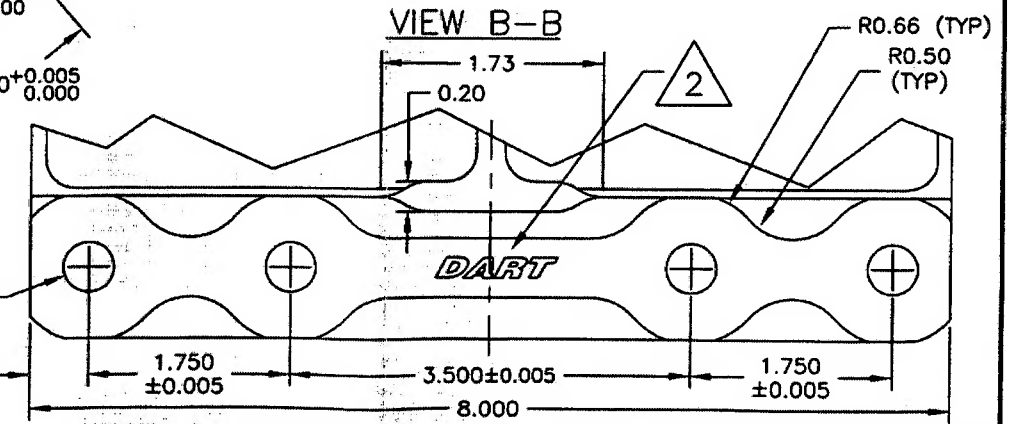
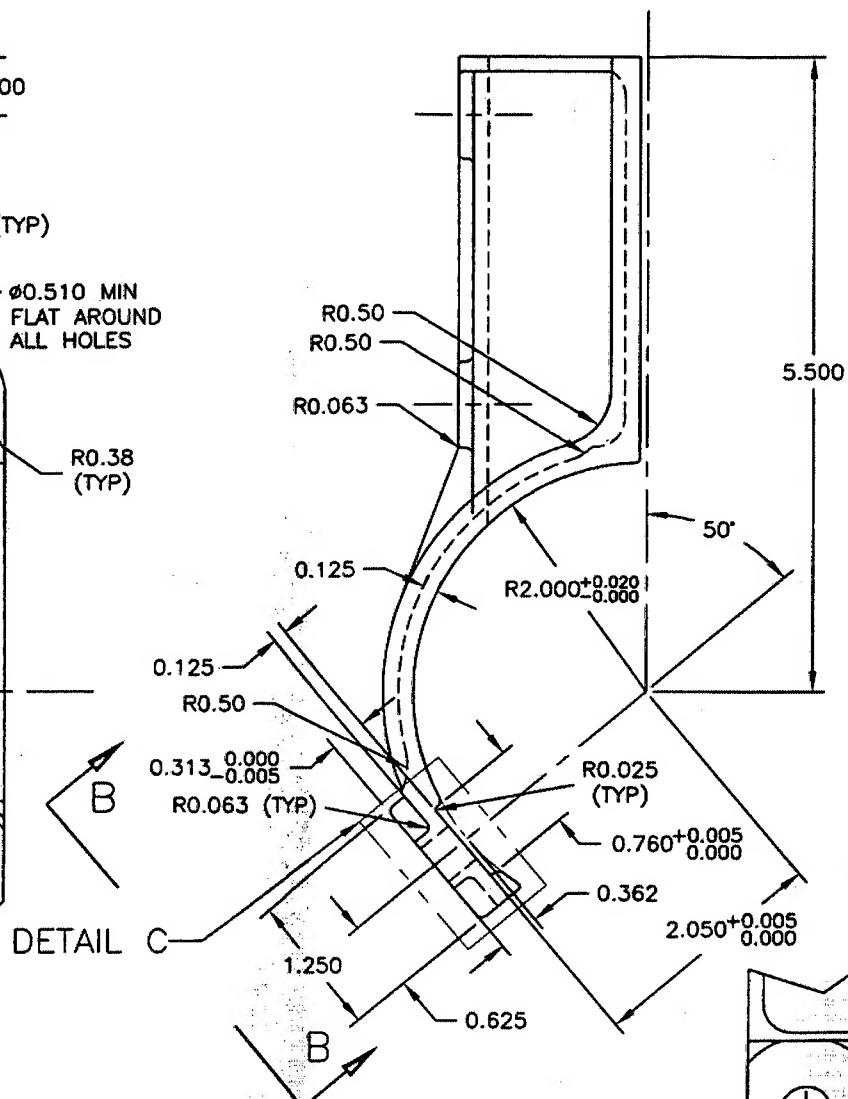
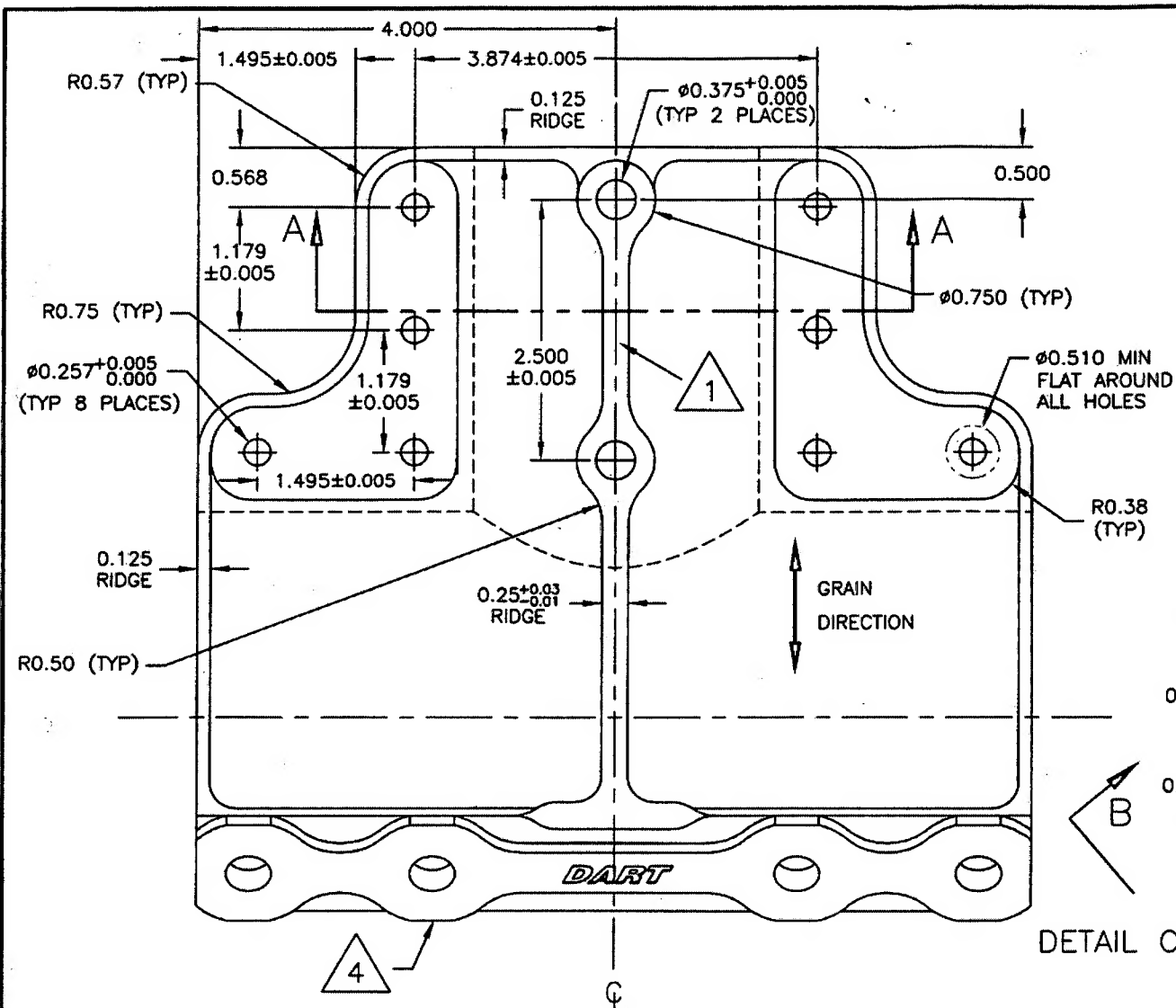
RELEASED
05.12.06

NOTES

MATERIAL: 7075-T7351 (QQ-A-250/12) (REF DART SPEC. D6102-001)
FINISH: ACID ETCH, ALODINE PER DART QSI 005 4.1
POWDER COAT GLOSS WHITE (REF 4.3.5.1) PER DART QSI 005 4.3
BREAK ALL SHARP EDGES 0.010 TO 0.020
TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

- 1 ENGRAVE PART AND BATCH NUMBER IN THIS AREA TO MAX DEPTH OF 0.010
- 2 ENGRAVE DART LOGO TO MAX DEPTH OF 0.015 WITH MIN RAD 0.125
- 3 CHAMFER 0.063" x 45° AROUND THIS SURFACE (TYPICAL 2 PLACES)
- 4 CHAMFER 0.063" x 45° ALL AROUND
- 5 CHAMFER 0.033" x 45° (SEE DETAIL C)

SHOP COPY
RETURNED
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 39806



DETAIL C
SCALE 4:3

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E	05.07.13	ADD CHAMFER ON RIDGE, NOTE 5
D	02.09.06	ADD RIDGES; TIGHTEN TOLERANCES
C	99.10.22	INCORP. DEO 9123/9079/9102 ADD DIMENSIONS PER TSR A1177
B	96.12.02	ADD GRAIN DIR., 0.438 WAS 0.425
A	96.09.16	NEW ISSUE
DESIGN	DS	DRAWN BY PH
CHECKED	PH	APPROVED PH
DATE	05.07.13	TITLE
		OUTER FWD SADDLE
		SCALE
		2:3

DART DART AEROSPACE LTD.
HAWKESBURY, ONTARIO, CANADA

DRAWING NO. D2571
REV. E
SHEET 1 OF 1

